



High Performance Computing Software

JPL Internal Seminar Series

High-Level Programming Support for Cascade by

Dr. Hans P. Zima

Thursday, August 7, 2003

12:00 noon – 1:00 p.m.

Building 126, Room 225

The Cascade project targets the development of a PetaFlops computing system by 2010. The project is funded by DARPA in the framework of the High Productivity Computing Systems (HPCS) program and is led by Cray Inc., with Caltech/JPL, Notre Dame University, and Stanford University as participating partners. After a one-year study (July 2002 - June 2003) that resulted in a strawman architecture the current Phase II (2003-2006) will develop hardware and software prototypes and prepare a specification for the final product to be developed.

In this talk we initially outline the major features of the strawman hardware architecture and the related execution model. In the main part of the talk we discuss an approach for a high-level programming paradigm for Cascade and related language design and implementation issues.

For questions, please contact Dan Katz at 4-7359.